



FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

44th ANNUAL REPORT

FOR THE FISCAL YEAR JULY 1, 1973 TO JUNE 30, 1974

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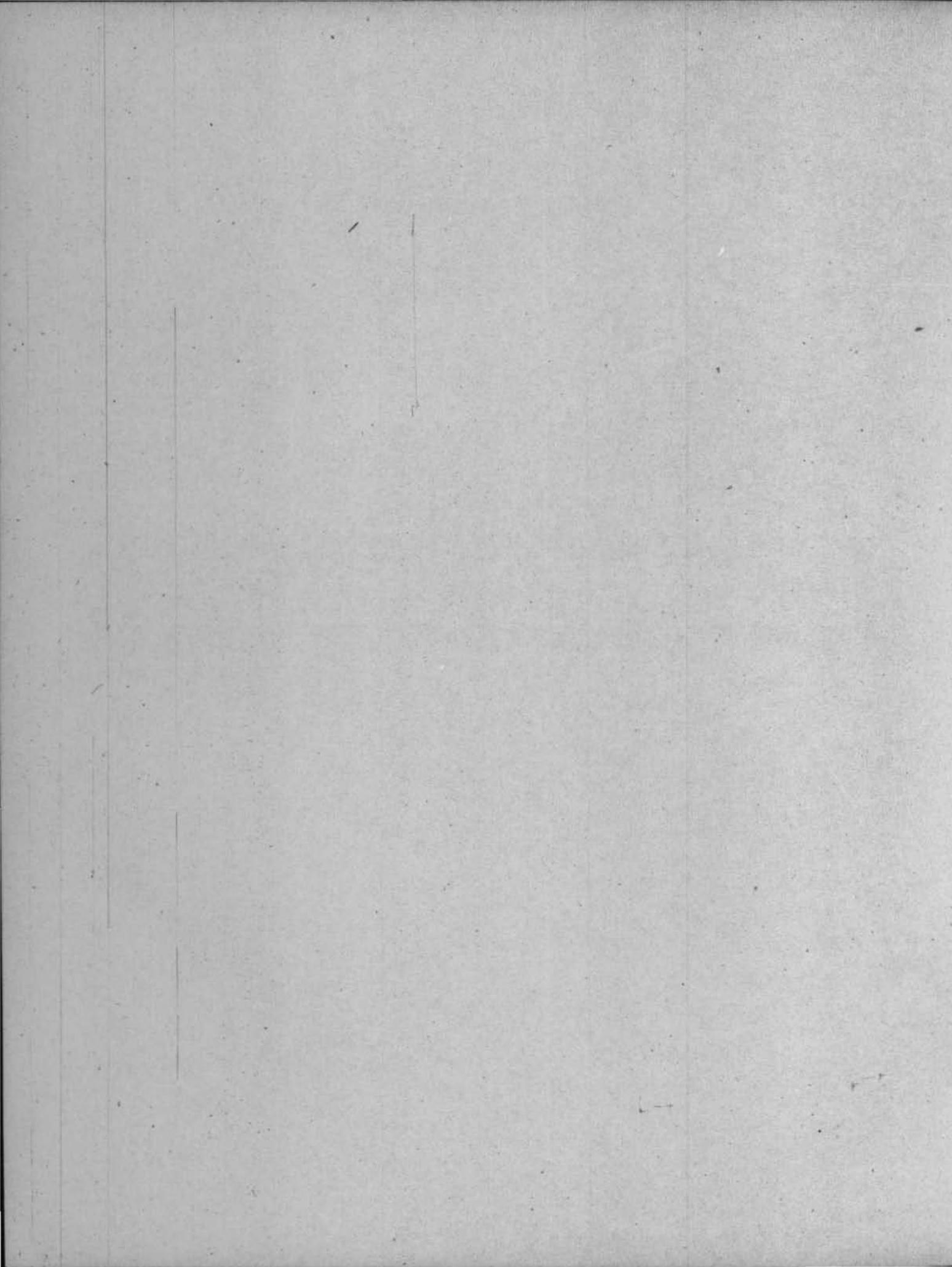
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Letter To The Governor

The Honorable Reubin Askew
Governor of Florida
Tallahassee.

Dear Governor:

It is my pleasure to submit to you and to the people of Florida the annual report for the fiscal year 1973-74 for the Florida Department of Agriculture and Consumer Services.

This report cites the major services and programs provided by the department during the year which ended June 30, 1974.

Cordially yours,

Doyle Conner
Doyle Conner
Commissioner



INTRODUCTION

The 1973-74 fiscal year has been a busy and important one for the Department of Agriculture and Consumer Services. Not only has Florida agriculture continued to grow, but the public has become increasingly aware of activities in the area of consumer services.

There have been significant advances in every division within our department. But to conserve paper and other costs, this report will highlight only a few of the major priorities during the year.

The achievements of the department during the fiscal year are a source of pride for all of the department's employees, and I wish to express my appreciation for their dedication and spirit. By like token we are grateful for the assistance and cooperation which we received from every segment of related industries and from all levels of state government.

It is this department's hope that its activity can gear itself to meet the changing needs of this growing state and constantly strive to do the kind of job needed in all areas of responsibility.

—DC

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INTRODUCTION

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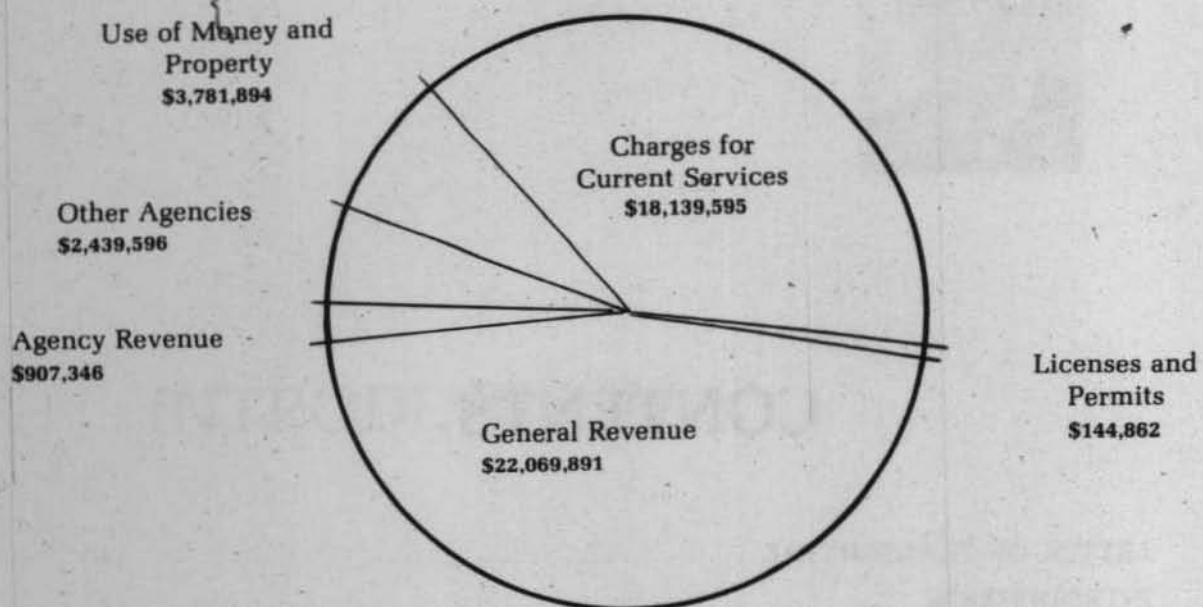
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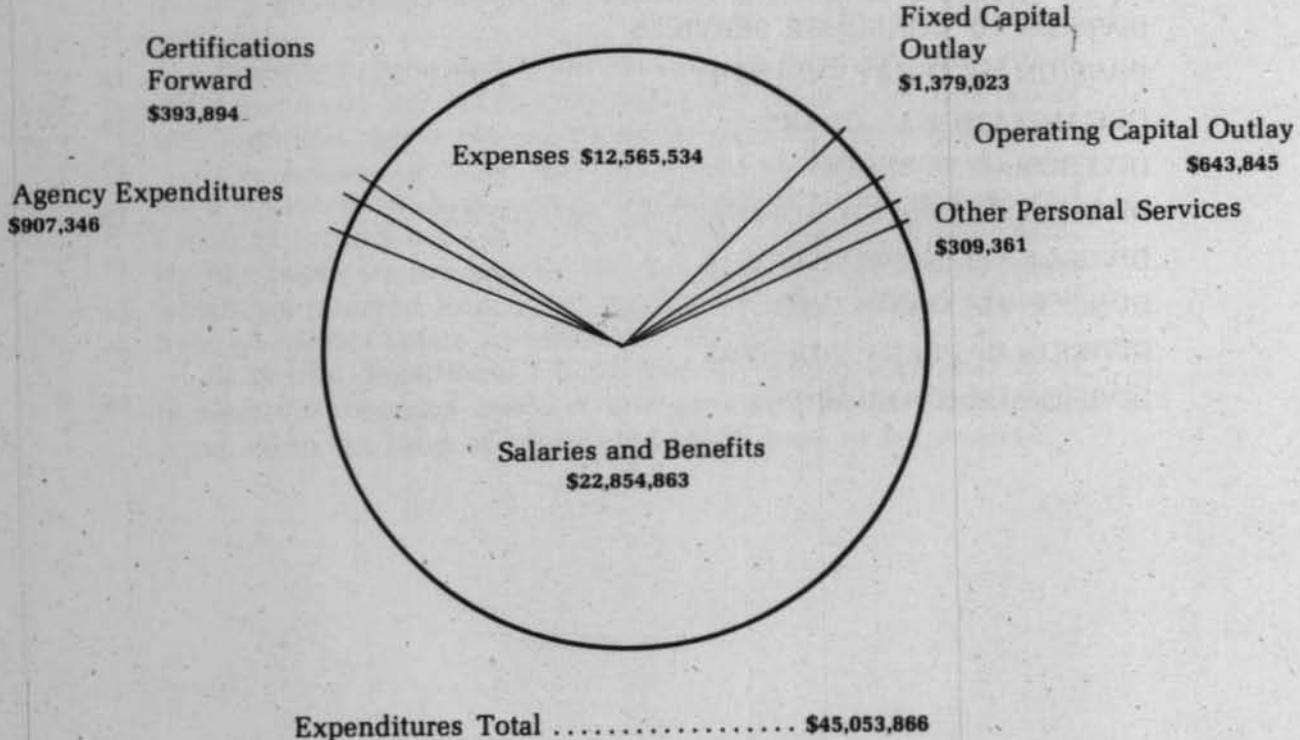
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RECEIPTS AND EXPENDITURES

July 1, 1973 through June 30, 1974



Sources of Revenue Total \$47,492,190



Expenditures Total \$45,053,866

Administration

The assistant commissioner, Harold Hoffman, also serves as director of the division of administration.

This division is responsible for providing staff, administrative and logistical support to all headquarters and regional programs and offices. These services are administered through four bureaus: financing and accounting, general services, information research services, and personnel.

FINANCE AND ACCOUNTING

In the past year this section has taken steps to improve efficiency and work flow by reorganization of the structure of the unit. It is felt that this will allow a better flow of information and facilitate management decision making.

The unit continues to work toward full implementation of the automated prototype accrual accounting system. The unit has also progressed in the budget area with further implementation of the automated budget system.

Increased federal grant-in-aid activity and planning and budgeting has greatly increased the workload of the unit.

appeared in 35 fairs throughout the state. Over 14,000 photographs were shot and distributed.

In addition to the annual report, the section reprinted booklets on Florida agricultural statistics, vegetable gardening, and swine production. It also produced the "Directory of Florida Agriculture Groups" which is revised quarterly.

The section researched and answered 18,200 letters and distributed 175,000 pieces of literature. At the same time, there were about 7,800 telephone contacts and 1,200 office visits.

GENERAL SERVICES

This section is responsible for departmental purchasing, maintenance, duplicating, mail distribution, supplies, communication and coordinating all records management with board of archives and records management. Work involves the development of procedures necessary to carry out these responsibilities.

Purchasing is responsible for writing, checking or revising specifications, preparing and mailing bid invitations to prospective vendors, checking requisitions prepared by other divisions and issuing purchase orders.

Custodial maintenance, grounds care and security come under the maintenance section. The duplicating section is charged with the responsibility of volume production of a wide variety of departmental forms, informational material, reports and similar material.

Mail distribution sorts all incoming mails, checks for revenue and makes certain each division's mail is delivered on schedule. Supplies section supervises the entire storeroom operation for the department.

The communications section includes the switchboard operators.

PERSONNEL

The personnel section is responsible for maintaining the official records of this agency's employees and for the administration and interpretation of the personnel rules and regulations of the career service system.

During this year the revised employee performance evaluation and development system was implemented on a department-wide basis. The pilot program participated in by the Division of Forestry, Marketing and Administration was successful and a great deal of practical knowledge was gained through their trial experience with the new system.

Problem areas were noted and appropriate changes made. These changes were incorporated within the department's employee performance evaluation training program. All non-supervisory employees, on a state-wide basis, received a minimum of four hours of training relative to this new method of performance evaluation. All supervisory personnel received a minimum of 12 hours training. The training sessions were conducted to insure that all department personnel were familiar with and understood precisely upon what criteria they would be evaluated.

A computer program was also developed to pre-print evaluation forms. This program generates the forms on a monthly basis using less than one-half hour of computer time. Utilizing the computer for six hours per year has saved approximately 1,056 man hours of time that was spent in manual preparation of similar forms.

The new performance evaluation was 100 percent implemented agency-wide by the close of the fiscal year.

We are pleased to note that the new employee performance and evaluation system has received national recognition in seven major personnel publications. At years end the department has received over 100 inquiries from different states, counties, cities and private businesses about this new evaluation method. To date our correspondence indicates that 23 of these organizations have adopted the system in its entirety or have incorporated significant portions of it within their systems.

INFORMATION SERVICES

This office is responsible for information services both internally and externally, and provides public relations support for the different divisions. The purpose is to keep the public informed of the latest developments which the department is using to serve the people of Florida.

To accomplish this end, the section sent approximately 250 news releases and feature articles and produced 35 special stories and documents for publication. There were about 300 broadcast items produced and two training films.

Information Services representatives attended 50 technical meetings and worked with the department's fair exhibit which

Animal Industry

The Division of Animal Industry administers laws, rules and regulations to promote the health and welfare of Florida's livestock and poultry industries and to protect the consuming public. The major functions of the division relate to programs to prevent, control and eradicate dangerous transmissible diseases of livestock and poultry, and to inspect meat and poultry food products for wholesomeness and proper labeling as to ingredients.

ADMINISTRATION

A 10-man Animal Industry Technical Council serves as an advisory body to the division and to the Commissioner of Agriculture and Consumer Services. The council meets at least quarterly and provides to the members of the livestock industry and the public an opportunity for input into recommendations for changes in rules and regulations affecting the division's programs. The council is composed of four representatives from the beef cattle industry, and one member each representing the dairy, equine, poultry and swine industries, the meat packers and independent agricultural markets.

The office of the Director of Animal Industry provides executive direction, supervision and support services for all bureaus and units of the division. The director cooperates with the U. S. Department of Agriculture Animal and Plant Health Inspection Service and his counterpart in the other states in the development of programs which are regional or national in scope, so as to attain uniformity of program direction among states.

MAINTENANCE UNIT

During the past year, the work load of this unit has increased because of the advancing age of buildings and equipment and the wider acceptance of work from other divisions. The escalation of costs and commodities has emphasized greater use of the maintenance crew in all activities.

It is this unit's practice to service all automotive equipment at 60 to 90-day intervals and to perform such preventive maintenance as may be indicated. This procedure has been responsible for considerable savings and has increased the productive life of all rolling stock. Less frequent periodic surveillance has also been extended to such equipment as air conditioning and refrigeration units, boilers, incinerators, pumps, compressors and similar units in the several locations of division offices.

The unit has maintained all field equipment and supplies necessary for program operation to prevent breakdowns and interruptions of service to the industry.

MARKS AND BRANDS UNIT

769 new livestock brands were registered in 1973-74, making a total of 11,887 brands on the register. 9,503 are listed as active brands and 2,369 as inactive. 937 livestock hauler permits were issued during the year.

This unit assisted in the investigation of 144 complaints of missing, stolen or slaughtered livestock. 1,862 cattle, 59 swine and four horses with a total value of over \$500,000 were reported missing or stolen. The amount of increase in number of all types of

livestock theft was 156 percent and the increase in value was 347 percent over the previous year. 56 head of livestock were recovered.

During the year 24 males and four females were arrested on charges in connection with livestock theft or other vandalism. Disposition of all cases is not complete as of this reporting.

Members of the investigative unit appeared on numerous television programs throughout the state, attended meetings of law enforcement organizations and industry groups and discussed problems involved in the prevention and investigation of livestock thefts.

The first livestock theft prevention seminar was held in Orlando in March, 1974. This seminar was sponsored jointly by the department, the Florida Sheriff's Association and the Florida Cattlemen's Association and was attended by over 200 livestock owners, law enforcement officers, and lawmakers. The purpose of the seminar is to delineate the problem of livestock theft and seek ways to halt it. The seminar will be an annual event and should produce a coordinated effort of all groups and agencies concerned with the problem.

BUREAU OF CONTAGIOUS AND INFECTIOUS DISEASES

The personnel of this bureau continued routine duties involving the inspection of animals at 34 livestock auction markets and on farms and ranches for evidence of transmissible diseases and disease vectors. New responsibilities were also assumed in connection with the equine infectious anemia program.

No serious problems arose so far as the swine population of the State was concerned during the year. All larva specimens submitted to the division's ectoparasite identification center were classified as other than screwworms and no cattle fever ticks were found.

The most important and far reaching program conducted during this year was the statewide control program involving equine infectious anemia (swamp fever). The control program went into effect Oct. 15, 1973, and was fully implemented by Jan. 1, 1974. The main thrust of the program at this time is to control the disease by prohibiting the movement of infected animals to concentration points such as racetracks, rodeos, shows, fairs, public boarding stables and similar public assembly points. All equine animals moving to such points or changing ownership must have had a negative test within the preceding 12 months. Horses entering Florida must be negative to test within six months prior to entry.

Animals which are found to be infected with EIA are permanently identified by lip tattoo or brand and remain in isolation and quarantine until sold for slaughter or euthanized by the owner. The regulation provides means whereby infected animals may be released from quarantine in the event a cure is developed which will successfully cleanse the animal from infection. At the present time there is no known cure or preventive vaccine for the disease, but extensive research is being conducted in both fields at numerous institutions in this country.

During the year 81,006 animals were tested for EIA with an infection rate of 6.2 percent. This reaction rate should decrease as reactors are located and removed from contact with clean horses.

There were 41 positive equine piroplasmosis (tick fever) cases found in the state, mostly in the Dade-Broward county area. This disease is transmitted by the *D. nitens* tick, commonly known as the tropical horse tick. This vector is normally found in the southernmost part of the state where the year round warm temperatures are favorable to their propagation.

All animals on infected premises where the tropical horse tick is found are systematically treated at 21-day intervals until the tick is eradicated. Infected animals are treated and if successfully cleansed of the disease all quarantine restrictions are removed.

Personnel of the USDA Animal and Plant Health Inspection Service participate in enforcing regulations governing the control of equine piroplasmosis.

BUREAU OF POULTRY SERVICES

The Bureau of Poultry Diseases is responsible for control and eradication of infectious and contagious diseases of poultry. The bureau also administers the national poultry improvement plan.

Specific disease control programs are conducted in regard to *S. pullorum*, fowl typhoid, and *M. gallisepticum*. In addition, eradication or control measures are instituted when other diseases constitute a threat to the poultry population, such as, infectious Laryngotracheitis or exotic Newcastle disease.

During the past year 189 hatchery inspections were performed. Periodic inspections and tests must be made to assure that standards of sanitation and disease criteria are met. Hatchery air and swab sampling for presence of bacteria is routinely employed during hatchery inspections. Over two million breeder chickens were tested for *S. pullorum*, fowl typhoid and *M. gallisepticum* disease.

The bureau is also responsible for enforcing the law requiring all hatcheries and poultry farms to provide for sanitary disposal of dead birds and hatchery residue. 975 poultry farms and hatcheries have been issued certificates of compliance (or approval) of their dead bird disposal facilities. During the year 1,085 disposal facility inspections were performed.

The bureau issues permits for importation of poultry into the state. During the 12-month period ending June 30, 1974, 83 permits covering 1.4 million birds were issued for importation. During the same period, health certificates for export purposes were issued covering 7,200,000 dozen hatching eggs and 12 million chicks, poultry, and miscellaneous birds.

The bureau directs epidemiological investigations and enforces control measures, including quarantine and eradication, when a poultry disease constitutes a threat to the poultry population of the State. Last October two premises were placed under quarantine for suspicion of exotic Newcastle disease. One farm was in the Macclenny area and the other quarantine involved a mixed back yard flock in Dade County. Both flocks were subsequently released from quarantine when our tests determined they were negative for the disease.

New regulations of the USDA Animal and Plant Health Inspection Service which became effective Oct. 30, 1973, allow commercial lots of birds to be brought into the United States and held in USDA approved quarantine facilities furnished by the importer for a minimum of 30 days. While in quarantine the birds are under

veterinary services supervision for examinations and tests to make sure they are free of exotic Newcastle or other infectious diseases. There are seven of these quarantine facilities in the Miami area. Personnel from the Bureau of Poultry Services regularly review their activities, including on-site inspections.

BUREAU OF BRUCELLOSIS AND TUBERCULOSIS

Although the total number of quarantined herds has reduced in the past 12 months many owners of dairy and beef herds have experienced severe economic loss. One prime reason for this in dairy herds is lowered resistance to the disease because of the discontinuation of calf vaccination in the states where replacements are purchased.

Testing was kept current until the middle of May, 1974, when federal indemnity funds were exhausted and it was necessary to relax the program for the remainder of the fiscal year. There is little doubt but that this discontinuation will result in a high number of reactors when testing is resumed.

There is an ever increasing spread between the salvage and indemnity received for a brucellosis reactor and the cost of a replacement. This is forcing many members of the industry to oppose the frequent (30-day) interval of test.

In October of 1973 a delegation went to St. Louis, Mo., to the United States Animal Health Association requesting that adult vaccination be approved in certain infected problem herds. This request was defeated by a margin of 11 to 10. Continued efforts are being made to obtain this approval.

At the end of this reporting period there were 254 infected beef herds and 62 dairy herds in the State.

There are 23 certified free counties with the remainder being modified certified.

One large beef herd was depopulated at the onset of this fiscal year. This was necessary because the disease did not respond to the usual testing methods.

Two dairy herds were under quarantine for tuberculosis infection during the year. One has qualified for release and the other is qualifying through the normal test procedure.

BUREAU OF DIAGNOSTIC LABORATORIES

The Bureau of Diagnostic Laboratories has been very active during this fiscal year. While the routine diagnostic procedures showed a slight increase, or held their own in numbers, the new test for equine infectious anemia moved into great prominence as a disease control diagnostic procedure.

In routine diagnostic work, a total of 190 bovines of all ages were autopsied. In the same type of work, 60 equines of all ages were autopsied and 36 swine were also autopsied. All swine routinely autopsied are still examined for hog cholera by surveillance techniques, though no native cases were discovered. Histopathological examinations of separate specimens continues to be on the increase, mostly in the examination and evaluation of neoplastic tissues. Fungus identification also continues to increase, especially since the advent of proper culture medias and containers which permit initiating the culture at the time of examination of the animal involved. This fresh culture approach has resulted in a greater number of successful cultures of pathogenic fungi, thus rendering a better service to the veterinarian and animal owner.

The branch laboratories have been increasingly active during the past year. All have, in general, shown an increase in accessions and in their own area are rendering valuable aid to the animal population. The Miami Springs laboratory has rendered support to the group in that area who are concerned with conservation of

wildlife in case of man-made or natural catastrophe. The Dade City laboratory is offering the same to groups in its area. The Kissimmee laboratory is allied with a local group on the East Florida coast and the statewide group led by the Game and Fresh Water Fish Commission, which includes practicing veterinarians, wildlife conservationists, laboratories (government and private), public health officials and industrial representatives. All these are prepared to make recommendations and/or take action in case of ecological disaster resulting from actions of man.

The Live Oak laboratory has remained at about the same level as previously because of lack of sufficient personnel. Vigorous recruiting has failed to fill a vacancy at this laboratory.

The Cottondale laboratory has remained at about the same level also, though in the last month of the fiscal year personnel completed training to begin EIA testing at that laboratory in the near future.

BUREAU OF MEAT INSPECTION

On July 1, 1973, an amendment to Chapter 585, Florida Statutes, required the Bureau of Meat Inspection to officially supervise the custom exempt meat establishments to enforce the sanitary requirements as required by the federal Wholesome Meat Act. This work proceeded in an orderly fashion with cooperation from the majority of the custom operators. However, it was found that a number of individuals were operating completely outside the law. Violators were given written notice to cease activities until such time as they conformed with the requirements. It was necessary to institute legal action against two individuals who operated in defiance of the law, and both were found guilty and fined by the court. The publicity from these actions caused several other violators to cease such activity.

The intensive training program that had been planned for the fiscal year had to be abandoned because of a \$40,000 cut in our appropriations. An increased allowance in per diem, increased printing and paper cost, and increased postage further intensified the need for cutting down activities. It was necessary to reduce our inspectional visits in many areas to such a degree that it was very hard to maintain the standards of consumer protection that are necessary. Early in May the appropriation cut was reinstated making it possible to bring the standard of inspection back to where it should be, and to resume the training course schedule.

STATISTICAL INFORMATION Division of Animal Industry Fiscal 1973-74

BUREAU OF BRUCELLOSIS AND TUBERCULOSIS

Cattle Tested for Brucellosis	741,436
Percent of Cattle Infected	1.23
Swine Tested for Brucellosis	1,075
Percent of Swine Infected	9.03
Cattle Backtagged at Markets	114,817
Cattle Tested at Slaughtering Establishments	144,590
Percent of Cattle Infected	1.38
Calves Vaccinated	54,850
Cattle Tested for Tuberculosis	149,943
Percent of Cattle Infected0013

BUREAU OF CONTAGIOUS AND INFECTIOUS DISEASES

Cattle Inspected at Livestock Markets	666,021
Swine Inspected at Livestock Markets	306,438
Livestock Inspected on Farms	2,114,373
Garbage Feeders	514
Swine Fed Garbage	36,878

BUREAU OF POULTRY SERVICES

Hatchery Inspections	189
Birds Tested for Pullorum Disease	1,134,777
Birds Tested for M. Gallisepticum	1,078,261
Foreign Exports, Baby Chicks	11,944,505
Foreign Exports, Hatching Eggs, doz.	7,203,653

BUREAU OF MEAT INSPECTION

Animals Slaughtered	454,302
Poultry Slaughtered	6,888,018
Red Meat Products Produced Under Inspection, lbs.	655,105,915
Red Meat Products Condemned, lbs.	4,245,325
Poultry Products Produced Under Inspection, lbs.	160,607,125
Poultry Products Condemned on Ante-mortem, lbs.	120,614
Poultry Products Condemned on Post-mortem, lbs.	4,368,687
Products Certified, lbs.	4,835,298
Products Rejected for Certification, lbs.	141,180

BUREAU OF DIAGNOSTIC LABORATORIES

Cases Submitted	38,409
Tests Performed	219,235

EQUINE DISEASE CONTROL PROGRAM

Animals Sprayed and Inspected	45,653
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MARKS AND BRANDS UNIT

Theft Complaints Investigated	137
Theft Warrants Secured	31
Brand Certificates Issued	769
Livestock Hauler's Permits Issued	938

Chemistry

The Division of Chemistry has the primary responsibility for conducting laboratory analyses on samples submitted by state agencies and for providing, when necessary, technical evaluations to enforce the following five chapters of the Florida Statutes: pesticides, food, drug and cosmetics, fertilizers, seed certification, seed and feed.

Examples of the type of technical assistance provided by personnel of this division to assure compliance with appropriate state laws are as follows: (1) approve applications for registration of fertilizer, (2) review food labels, (3) examine pesticide labels presented for registration and (4) verify seed labels. The laboratories of this division conduct various chemical, biochemical, microbiological analyses as well as physically test and evaluate a wide variety of products sold in the state to protect the Florida consumer and purchasing public.

Samples to be analyzed, examined or tested are usually obtained through inspectors employed by the various divisions in this department or from other state agencies and forwarded to one of our laboratories. If the analyses indicate the sample is illegal, subsequent enforcement action is the responsibility of the division or state agency that originated the sample or commodity.

The only exception to the enforcement responsibility is the pesticide residue laboratory where fresh vegetable field samples are obtained through inspectors directly under the control of this laboratory. Any necessary enforcement action required on these particular samples would be the direct responsibility of this laboratory.

During the past fiscal year, the Division of Chemistry was authorized a total of 106 positions, of which eight are located in laboratories in central and south Florida plus four field inspectors assigned to furnish samples to the laboratories. The Division of Chemistry is composed of an administrative section, a sample preparation and supply section and the following laboratories: pesticide residue, pesticide, fertilizer, feed, seed, food, commodity testing and methods development.

During the fiscal year these laboratories examined and analyzed over 50,000 individual samples of feed, fertilizer, food, pesticide, pesticide residue, seed, institutional and other miscellaneous products. The actual number of individual tests and determinations conducted on these samples during this period were well over 300,000.

PESTICIDE RESIDUE LABORATORY

The four laboratories of this bureau, located in Tallahassee, Sanford, Miami and Belle Glade, analyze all types of foods and feeds for excessive pesticide residues. During the past fiscal year, the pesticide residue laboratories have analyzed about 8,650 samples. Approximately one-sixth of these samples were fresh vegetables collected by four field inspectors assigned to this bureau. The remaining samples analyzed for pesticide residues included meat, milk, poultry, eggs, feed, seafoods and other speciality foods.

All of the laboratories of this bureau are designed to move perishable samples through them as rapidly as possible. This is done by employing a variety of screening procedures to detect volatile amounts of pesticides and issue laboratory reports while the perishable products are still available for action to be taken to prevent their movement into intrastate or interstate commerce.

A new distillation apparatus was installed at the Sanford laboratory to improve the safe handling of volatile solvents and enlarge the storage area. Construction of a new laboratory facility at

Port Everglades will be completed in July 1974 and the laboratory personnel presently in the Miami laboratory will be moved to the new location as soon as possible thereafter. The Miami laboratory will be phased out as soon as the new laboratory is completed.

New contracts with the U.S. Food and Drug Administration have been approved for analysis of 900 samples of frozen food products consisting of breaded fish sticks, breaded shellfish, vegetables, casseroles and nationality dishes. All four pesticide residue laboratories have been very active this fiscal year analyzing samples of meat and poultry within the requirements of the Wholesome Meat Act.

A monitoring system on milk and milk products, in which each dairy is sampled at least twice a year, has resulted in excellent control of excessive pesticide residues. Improved equipment has allowed us to expand our capability of the field laboratories to check a broader spectrum of pesticides in routine screens and further expansion is expected this next year.

PESTICIDE LABORATORY

The pesticide laboratory operates under the Florida Pesticide Law, Chapter 487, Florida Statutes. The purpose of this act is to provide protection for the home gardener as well as the commercial user of pesticides. Under this act every pesticide which is distributed, sold or offered for sale in Florida must be registered with the Division of Inspection. One of the main responsibilities of this laboratory is to analyze all pesticide samples submitted to determine whether the percentages of guaranteed active ingredients in the formulation are within the tolerance allowed in the Pesticide Act.

This laboratory also examines all pesticide labels that are presented for registration to verify their conformance with the act and recommend any corrections necessary to secure registration. Pesticide formulations are examined to determine the presence of unguaranteed chemicals which might result in illegal residues on Florida Crops.

The pesticide laboratory processed 6,469 samples during this fiscal year compared to 5,818 for the previous year. The laboratory was involved in several collaborative programs with AOAC and also the AAPCO check sample program which consisted of nine samples.

FERTILIZER LABORATORY

The fertilizer laboratory is responsible for the laboratory and technical phases of the enforcement of the Florida Commercial Fertilizer Law, Chapter 576, of the Florida Statutes. Official samples of commercial fertilizers offered for sale in Florida are analyzed for the primary plant foods, nitrogen, available phosphoric acid and water soluble potash. Secondary plant foods such

as magnesium, manganese, copper, zinc, iron, boron, chlorine, sulfur, etc., are also analyzed when guaranteed. Samples of dolomite and limestone are analyzed to determine if the guarantees are met as to content of calcium and magnesium. Microscopic examination of fertilizer samples is made to verify the source materials stated on the label and detect discrepancies.

A state chemist fertilizer analysis report is mailed to the manufacturer, dealer and consumer involved with each sample. If the analysis indicates that any ingredient falls outside the legal tolerance, the sample is issued as deficient and a monetary penalty is assessed. This penalty is paid to the consumer by the manufacturer. In January, 1974, a computerized system for handling laboratory data and preparing state chemist fertilizer analysis reports was implemented. This system greatly simplifies the preparation of the quarterly report and compilation of other statistical data.

The fertilizer laboratory checks applications for registration of commercial fertilizers to determine if all guarantees and claims are compatible with the ingredients present. Over 8,000 applications were examined during the past fiscal year. A program of methods research is continuously carried out to keep abreast with new materials and to make use of new instrumentation. This laboratory conducted approximately 87,000 separate analytical determinations on a total of 7,600 samples of which over 25 percent were deficient.

SEED LABORATORY

It is the responsibility of this laboratory to check the quality of seed offered for sale to Florida consumers, protect Florida dealers who purchase seed from other dealers, and promote good quality seed. Certified samples are drawn from seed grown under our certification program. Seed labels are reviewed, purity and germination analyses conducted, condition of labeling determined, and seed laboratory reports issued. Percent pure seed, inert matter, other crop seed and weed seed are determined. All other crop seed and weed seed are identified. A larger sample is checked visually for the presence of noxious weed seed.

Seeds are also examined to verify the variety, resorting to field growout tests when necessary. Growth tests are made to determine the percent of the seeds capable of producing normal plants in the field. During this fiscal year, the seed laboratory reported 10,656 seed samples with a total of 37,297 determinations. In addition, approximately 200 soil grown tests were conducted in the greenhouse and approximately 500 samples were field tested for variety.

FEED LABORATORY

This laboratory conducts analyses on all types of animal feed sold in Florida, thereby assuring these feeds are in compliance with the provisions of the Florida Commercial Feed Law. When necessary, laboratory analytical data are used as legal evidence to gain compliance with the law. The major portion of this laboratory's analytical effort is devoted to cattle, poultry, horse and swine feeds. Determinations conducted on these samples are for protein, fat and fiber as well as routine analysis for moisture, ash and equivalent protein from non-protein nitrogen.

Analyses are also made for minerals guaranteed on the label such as calcium, phosphorus, salt, iron, copper, cobalt, manganese, magnesium and zinc. Medicated feed additives commonly used in cattle, poultry and swine rations such as coccidiostats, wormers or medications to aid in stimulating growth or improve feed efficiency are also analyzed. Antibiotics used as additives and certain vitamins are also determined. A thorough microscopic examination is made on each official sample. Findings are checked against ingredients claimed and any differences are noted and reported.

The Forage Testing Program, in cooperation with the Agricultural Extension Service, was continued and an update of all data obtained between 1967 and 1973 was completed and published. Plans are to continue this cooperative program since it has gained acceptance as an established service throughout the state. Contractual agreement with FDA funding for analyses of medicated feed samples taken in connection with inspectors medicated feed mill inspection was established and plans are to continue and expand this program. Two chemists jointly participated in an AOAC collaborative method improvement study for vitamin A in mixed feeds. Investigative work was done on the method for total sugar in molasses and liquid feeds. Consideration is continuing concerning requirement of total sugar as well as moisture guarantees for these specialty feeds. This laboratory completed 65,252 determinations on 6,685 samples.

METHODS DEVELOPMENT LABORATORY

The methods development laboratory worked on three programs involving other state agencies. First, the laboratory initiated a fluorescent lamp testing program for the Division of Purchasing, Department of General Services. Tests were selected for measuring parameters that will enable the Division of Purchasing to determine if it is most economical to purchase fluorescent lamps for the state on the "lowest bid basis." Second, the laboratory is working with Division of Purchasing and the National Paint and Coatings Association in attempting to establish testing procedures for determining performance characteristics of paint. Third, the laboratory consulted with the Division of Beverage, Department of Business Regulations in their endeavors to regulate the "little cigar" business.

The major advancement in the laboratory for solving methodology problems of our division was obtaining operating capital outlay funds for a liquid chromatograph system and a fluorescence spectrophotometer, to be purchased during fiscal year 1974-75. The liquid chromatograph will be used to develop analytical methods primarily in the areas of food and feed nutritional analysis, food and feed additives, drugs and drug residues in foods and feeds, pesticides, and pesticide residues. The fluorescence spectrophotometer will be used in many of the same areas as the liquid chromatograph. It will not have as wide a scope of applicability and will be limited to analyzing fluorescing compounds.

FOOD LABORATORY

The food laboratory is responsible for the regulatory analysis of food to insure that it is safe and wholesome, that it is free from chemical, bacterial and physical adulterants, that it meets all state and adopted federal standards and that the food is properly represented in all respects. The laboratory is divided into three sections; food chemistry, meat chemistry, and microbiology. The laboratory also does compliance work, reviewing and setting up food labels and advising food processors.

During fiscal year 1973-74, the food laboratory increased sample analysis to 8,553 samples with 80,215 individual tests. An additional 224 samples were from special sources. Of this total, 72.85 percent were found to be legal and state action was taken on 27.15 percent. Samples are requested monthly from Florida food processors. Of the 1,500 food processors, we examined samples from 343 or 22.86 percent. Foods came from all divisions of the department, other state and federal agencies and directly from consumers.

Concurrent with regular sampling, we completed analysis of federal-state contract samples on canned shrimp; frozen foods in-

cluding breaded shrimp, fish sticks and vegetables; and inspectional samples from Florida bottling plants, bakeries and warehouses. For assurance of analytical results, food chemistry, meat chemistry and microbiology were all involved in check sample programs.

The food chemistry section increased its program of food additive detection, looking at artificial colors and measuring amounts of vitamins and minerals in foods from macaroni to dietary supplements. Major consumer complaint areas of filth in bottled drinks, bakery foods and spices were emphasized. With Florida's rise to first in honey production, a rise in concern for adulteration and a rise in our analysis on this food was seen.

The meat chemistry section tests meats for protein, moisture, fat, preservatives, nitrites, phosphates, added color, and extenders such as nonfat dry milk, cereal and soya products. More tests were run to detect the highest temperature the meat had reached in processing. We concentrated on a more rapid feedback to plant supervisors.

The microbiology section analyzes for the total bacteria in a food as well as coliforms, *E. coli*, *staphylococcus*, *Salmonella*, yeasts, molds, anaerobes and others. Disinfectants and sanitizers are also analyzed for their claims. Ground meats, canned foods and noodle products were emphasized.

Food laboratory members spoke at many consumer groups, food processor associations and made numerous television appearances discussing food subjects.

COMMODITY TESTING LABORATORY

The commodity testing laboratory analyzes and makes observations on bid samples submitted by the Division of Purchasing, Department of General Services. Follow-up testing is also done after these commodities are delivered to the state institutions. This laboratory cooperates with the products evaluation committee of the Department of Education by testing the janitorial supplies which vendors wish to certify for conformity to specifications with the Department of Education. This program has resulted in an improvement in the quality of the janitorial supplies and has increased the knowledge of the school purchasing agents. Miscellaneous consumer complaint samples, originating in the general public, are tested for the Consumer Services Division of this department.

Testing is done in the areas of laundry supplies, paper, paint, office supplies, janitorial supplies, metal office furniture and textiles. The state buys annually more than one million dollars worth of textiles for their various institutions. During the past year only 36 percent of the total samples tested met specifications. Quantitative determination of the amount of natural and synthetic fibers in textiles has shown a larger number failing this specification than did previously.

State agencies which have made use of the commodity testing program for the first time during the past year are: Divisions of Recreation and Parks, Marine Resources, Family Services and the Universities of South Florida and North Florida. During the past year the program has expanded in the areas of testing contemporary office furniture and carbon film ribbons for typewriters. One more chemist has been added to the laboratory staff. The laboratory conducted 14,916 individual tests on 1,475 samples submitted by the various state agencies.

Consumer Services

In 1969 when Florida's state government was reorganized, the Office of Consumer Services became the Division of Consumer Services. The name of the department was changed at the same time, but this did not mean that the department was doing something new; it was simply a full acknowledgement of the role the Department of Agriculture has played in protecting consumers since the department's inception in 1889.

The division's goal is to foster fair dealing and honesty in the marketplace and to instill in consumers a justifiable confidence that they will get fair treatment in dealing with business. By pursuing the following avenues of service during the last biennium we are confident that we have moved closer to the achievement of that goal.

CONSUMER EDUCATION

The Division of Consumer Services is committed to the philosophy that an informed consumer is the best protection against fraud. The consumer education function of this division has been accomplished through news releases to the various communications media, monthly newsletters, speeches, seminars, and other personal contacts, the distribution of printed literature, and through telephone calls. For example:

1. A monthly newsletter, "What's Cooking of Consumer Interest," is mailed to 5,000 households.
2. Approximately 10,000 households are reached through numerous speeches, educational seminars, and other types of public meetings conducted by personnel of this division each month.
3. Each month the division mails out an average of 7,500 pieces of educational literature on how to buy, use, and take care of consumer products.
4. Approximately 75,000 households in Florida are reached each month with our consumer alert news releases to radio, television and newspapers.
5. The division is becoming heavily involved with the state Department of Education in implementing Florida's new law requiring the teaching of consumer education in the public schools of our state.

CONSUMER PROTECTION

This division is involved in the receiving, classifying, and investigating complaints, and taking corrective action whenever possible. For special assignments in specific cases, personnel from other divisions of the Department of Agriculture and Consumer Services are called upon for needed supplementary service. The divisions of Chemistry, Inspection, and Standards work closely with the Division of Consumer Services in the analysis of questionable products and the enforcement of state law where products are found to be substandard. Enforcement is usually administered in the form of injunction after appropriate hearings.

Over 4,000 consumer complaints were received by the Division of Consumer Services during 1972. In 1973, 6,500 complaints were received. The most numerous areas of complaint were, in descending order: 1. Autos and Accessories; 2. Food; 3. Mail Order; 4. Home Construction and Maintenance; 5. Mobile Homes; 6. Appliances; 7. Vacation Schemes; 8. Finance; 9. Franchises; 10. Advertising and Sales.

During the last year, over 22,000 pieces of mail regarding complaints were mailed from the Tallahassee office; and 16,000 pieces of complaint mail were received in the Tallahassee office.

A survey of complaints where an exact figure was on record revealed that \$151.60 was the average savings for each consumer. However, it should be noted that many cases are resolved to the satisfaction of the consumer, but no actual dollar value is stated in the file. Not included in the above figure is one case wherein a number of Cuban refugees received refunds of \$243,000 from Glenn Turner's Dare to Be Great program as a direct result of the efforts of personnel of the Division of Consumer Services.

Dairy Industry

The Division of Dairy Industry enforces the Florida Milk and Milk Products Law, Chapter 502, Florida Statutes, and the Florida Ice Cream and Frozen Desserts Law, Chapter 503, Florida Statutes. The division has statewide jurisdiction for the enforcement of both laws.

There are four operating sections which work together to insure that only high quality milk, milk products and frozen desserts are sold to Florida consumers. The four sections in the Dairy Division are: administration, dairy farm inspection, dairy products inspection and dairy products laboratories. The Dairy Division has 51 personnel.

The dairy farms, milk plants and frozen desserts plants inspections are made by dairy specialists who are specialists in the milk and milk products industry.

During the 1972 Legislative session, the Florida Legislature passed what is known as the Florida Shelf Life Law, which requires that all fluid milk and milk products have a date stamped legibly on the container, after which the products should no longer be sold.

During this past fiscal year, the Division has continued to enforce this Law in connection with the Division of Inspection and assures consumers that they purchase only fresh fluid milk and milk products. During the 1973-74 fiscal year, the Dairy Division's regulatory activities were rated by the Florida Division of Health and check-rated by the United States Public Health Service, Food and Drug Administration, to insure that the quality of Florida milk and milk products sold in interstate commerce met the specifications of the United States Public Health Service Pasteurized Milk Ordinance.

The 1974 Legislative session passed a bill which removed the County Health Departments from the responsibility of inspecting dairy farms.

The Dairy Division has assigned three men to administer a comprehensive program of education and inspection of bulk milk haulers, bulk milk transports, and bulk milk transport cleaning facilities.

ADMINISTRATIVE SECTION

The administrative section is composed of a director, an assistant director, and their secretaries, who furnish administrative direction and support for the dairy farm inspection section, the dairy products inspection section, and the dairy products laboratory section.

DAIRY FARM INSPECTION

The dairy farm inspection section is responsible for all raw milk produced in Florida. This section makes sanitary inspections of all dairy farms in Florida as required by law, to see that each farm is operated in a sanitary manner and that the raw milk produced is of the highest quality. This section also collects samples to insure that the raw milk meets rigid quality standards.

The dairy farm section issues permits to farms after each farm demonstrates that it can maintain the required high sanitary and quality standards. It approves new construction, new equipment installation, and any renovation to existing equipment or facility. It inspects bulk milk transports at the farm, insures that proper milking procedures are followed, and insures that each farm observes Florida's rigid animal health regulations.

During 1973-74 the number of Florida dairy farms dropped to 415 from the 449 dairies from the previous year, a decrease of seven percent. During 1973, dairy cattle population increased to 203,000 from 198,000 in 1972, a total increase of three percent. Production per cow dropped approximately four percent, primarily due to the high increase in cost of feeds.

The requirement for annual tuberculosis testing was rescinded and now is required only every six years.

This section surveyed all Florida dairymen and found that 67 percent were now teat-dipping and 93 percent are practicing some form of dry cow therapy.

This section made 8,337 inspections on Florida's 415 dairy farms for an average of 20 inspections per farm for the year, and collected 5,080 samples for analysis, an average of one per farm per month. This section issued 158 citations involving 2,403,794 pounds of milk, of which 271,932 pounds were required to be destroyed.

DAIRY PRODUCTS INSPECTION

The dairy products inspection section is responsible for seeing that the provisions of Chapter 502, Florida Milk and Milk Products Law and Rules and Regulations, and Chapter 503, Florida Ice Cream and Frozen Desserts Law and Rules and Regulations, are being complied with from the time the milk is picked up at the farm and transported to the processing facilities until it is packaged in its many forms and reaches the hands of the consumer.

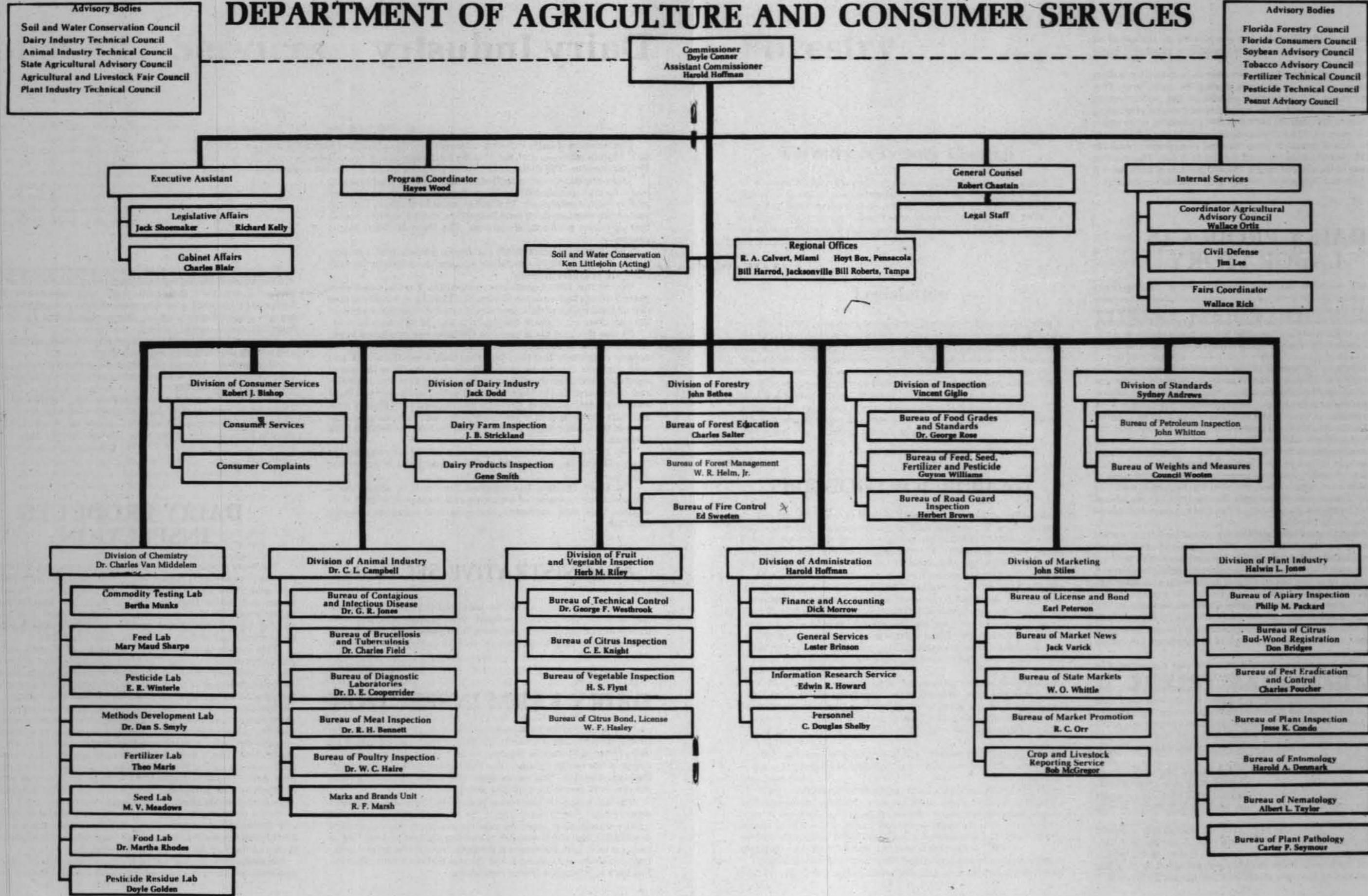
This section makes sanitary inspections of all milk and milk product plants and ice cream and frozen dessert plants in Florida. It also collects samples from all plants under its supervision and collects samples of milk, milk products and frozen desserts which are shipped in packaged form to Florida from other states.

The dairy products inspection section approves all new equipment installation, all new construction, all renovations occurring in milk, milk products and frozen dessert plants in Florida and inspects the bulk milk transports at the processing plants. This section also collects shelf-life samples and insures that all milk and milk products sold in Florida consumers are legibly dated with the final date the product should be offered for sale and that the products will be acceptable at least four days after the shelf-life expiration date stamped on the product container.

It also reviews and approves all milk, milk products, ice cream and frozen dessert labels before they are introduced into the Florida marketplace to insure they meet the truth-in-packaging laws and the Fair Packaging and Labeling Act.

During the fiscal year 1973-74, this section regulated 50 milk and milk products plants and 38 ice cream and frozen dessert

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plants. This section collected 7,243 samples for an average of 82 samples per milk or frozen desserts processing plant and made 3,574 inspections of these plants.

Dairy specialists from this section were in each facility making inspections an average of 40 times during the fiscal year. This section also made 274 pasteurizer checks on the pasteurization equipment used by Florida's milk and frozen desserts processing plants. It issued 76 citations on 1,853,660 pounds of dairy products. Of this amount, 625,521 pounds of products were destroyed, 168,069 pounds of products were diverted to ungraded products and 572,210 pounds were released for Grade A use. This section also returned to the state of origin 287,460 pounds of milk, which upon analysis and inspection did not meet Florida's standards.

DAIRY PRODUCTS LABORATORY

The dairy products laboratory section makes the regulatory analyses on all milk and milk products and frozen desserts samples submitted by the dairy farm inspection section and the dairy products inspection section. The backbone of any milk regulatory program is its laboratory section, and the section's ability to accurately and uniformly analyze those samples submitted by dairy specialists.

This section is composed of six laboratories geographically located throughout Florida to insure adequate laboratory coverage for timely analyses of product samples. The dairy products laboratory section conducts the Florida Department of Agriculture Milk Laboratory Certification Program in conjunction with the United States Public Health Service to insure that all milk laboratories run analyses in a uniform manner. This program insures that results obtained on a sample in South Florida would be repeated should the same sample be run in the Florida Panhandle.

The dairy laboratory which is located on Interstate 75 close to the Georgia border samples and analyzes the raw milk which is shipped into Florida from other states. During 1973-74, this laboratory analyzed samples from most of the 2,641 transport loads of milk imported into Florida.

Twenty-eight loads of raw milk were rejected for failing to meet Florida standards. Due to the division's program of checking all imported milk and milk products, the percentage of milk rejected for failing to meet Florida's standards is considerably less than in previous years, meaning the quality of milk being imported into this state is constantly improving.

1973-74 represented the first year in which the technicon auto-analyzer was used for the routine determination of somatic cell count in all raw samples. The determinations by the machine have been accurate, uniform, and have resulted in significant laboratory time savings.

1973-74 also represented the section's first year's experience in providing laboratory support for the Florida Shelf-Life Law. Florida is the only state that requires by actual laboratory tests that fluid dairy products be acceptable in flavor at least four days after the pull date placed on the container by the processor. By means of careful temperature controls, frequent milk testing seminars, and a shelf life split sample program, a high degree of proficiency and uniformity has been reached in milk flavor evaluations by laboratory personnel.

A chemist has been assigned the fulltime responsibility of laboratory survey officer, whose primary duty is to promote uniformity and accuracy in the six division laboratories. He conducts split sample programs in cooperation with the U.S. Public Health Service.

During the 1973-74 fiscal year, division laboratories received 19,847 samples and made 104,545 analyses. A survey was conducted of other regulatory laboratories in the United States, which showed that the Florida Dairy Division was exceeded by only one state in numbers of analyses completed per laboratory worker.

Forestry

Forestry Advisory Council

Commissioner Conner appointed B.T. (Buster) Longino of Sarasota to fill the conservation category on the council as provided by the Florida Statutes. His four-year term will expire September 7, 1977. Craig T. Bell's term expired September 7, 1973. He was presented a plaque in appreciation of his two four-year terms on the council.

or forestry operations must be obtained from the division. Approximately 65,000 open burning authorizations were issued during the year.

Legislation

The 1974 Legislature revised the Forestry Practices Act, Chapter 492, Florida Statutes, which relates to the registration of foresters and the practice of forestry in Florida. This revision provides that all foresters who perform any professional service on lands not owned, controlled or leased by that individual or his employer must be registered, except that a graduate of a forestry school may practice under the supervision of a Registered Forester until he acquires the two years of experience necessary for registration. The act also was changed to allow the Board of Registration for Foresters to set a registration fee not to exceed \$25.

FIRE CONTROL BUREAU

Dry conditions over most of the state during early 1974 caused an abnormally high incidence of fires and loss of acres burned. During the first six months of 1974, some 8,000 wildfires burned nearly one-half million acres of forest and wildland. These figures are only slightly less than the disastrous spring of 1971.

During the 1973-74 year, 10,674 fires burned 577,025 acres of forest and wildland. This was 2.2 percent of the 26,242,642 acres protected. Last year, 7,126 fires burned 206,480 acres. The fire rate per 100,000 acres burned was 40.7 this year compared to 27.2 last year. Average acres per fire was 54.1 compared to 28.9 for last year.

Division employees investigated 9,265 violations of Florida's forest fire laws with some type of deterrent action taken against 1,381 of the violators. One \$100 reward was paid from the Florida forest arson fund.

To aid local governments in developing improved fire protection for the unincorporated areas of the state, sixteen forestry districts began developing comprehensive fire plans for 55 of the 67 counties. Five plans were completed and were formally received by the county officials. Fifteen plans were nearly complete at the end of the year.

Through the division's rural fire defense program, 11,721 responses to grass and brush fires were made by the 400 cooperating fire departments.

With a reduced fire risk in the state in summer, Florida foresters and rangers are available, on a volunteer basis, to assist in fighting fires in the western United States when emergencies arise. Agreements with the U.S. Forest Service provide for such cooperation between the states. More than 40 of the division's personnel helped suppress fires in Montana and Idaho in August 1973.

Under the rules of the Department of Pollution Control, permission for open burning in connection with agricultural, silvicultural

FOREST EDUCATION BUREAU

The Environmental Education Center at Blackwater River State Forest held its first week-long student laboratory sessions in June 1974. By June 30, 58 high school students had accomplished field investigations of the diverse ecosystems offered by the center.

The bureau in cooperation with the Forest Management bureau participated in a statewide tree planting project with the Florida Federation of Garden Clubs. The federation bought the seedlings and arranged the planting projects. The bureau supplied the seedling packets and planting information. As a result, more than 10,000 trees were planted on civic beautification projects throughout the state.

The 1973-74 statistical summary revealed an extremely productive year in providing films, programs, exhibits and literature for a variety of groups and individuals over the state. As a random example, more than 2.6 million persons attended 319 exhibits held at fairs, stores and banks.

Requests for Arbor Day seedlings came from a record number of 666 Florida schools.

The bureau cooperated with the Division of Recreation and Parks in development of the Forestry Museum at Perry. The bureau served as consultant on history, equipment and exhibits. Wood samples of over 60 species of trees were obtained and provided for use in an exhibit at the museum.

The 39th annual forestry training camp was held at O'Leno State Park near High Springs for 180 FFA students.

FOREST MANAGEMENT BUREAU

Land management assists to landowners, primary wood-users and municipalities for the 1973-74 fiscal year totaled 3,755 requests on 3,352,321 acres. The requests were predominantly rural activities with the major portion of the acreage being accounted for in assists to woodland owners.

The urban forestry program was assigned a full-time forester to coordinate urban oriented cooperative forest management projects. New urban forestry positions were filled for Indian River, Seminole, Pinellas, Lee and Palm Beach counties.

The forestry incentives program was passed by Congress in 1974, and 35 Florida counties were designated as eligible for this program. The initial allowance for the state of \$189,000 was exceeded by \$190,841 in requests.

The statewide forest insect detection survey completed in August showed a decrease in losses by approximately 25,000 cords from the previous year. A large outbreak of southern pine beetles occurred in Leon County in late summer and fall of 1973. This was the first large outbreak in Florida in 22 years.

The two-year general forestry assistance project, which provided for an in-depth analysis of the forest resource and economic situation in Florida at the present and projected the needs of the state to the years 1980, 1990 and 2000 was completed. A summary report of 2,500 copies was printed and the complete two-volume report was ready for publication at the end of the year.

In cooperation with the U.S. Forest Service, Florida conducted 12 sawmill analyses to improve lumber recovery of pine mills throughout the state. It is estimated that as a result of these studies the mills can improve their efficiency and increase their lumber recovery by 12.8 million board feet from the same log input.

Approximately 54 million bare root seedlings were sold by division nurseries. The production of potted tropical species increased by more than 100 percent. Potted species sales totaled 165,160. Outstanding progress was made in the production of containerized eucalyptus for commercial timber growth with the seedling output increasing from 68,897 seedlings in 1972-73 to 138,224 seedlings in 1973-74.

Receipts from the Blackwater River State Forest reached a record high for the second straight year, exceeding \$1.8 million. This was due more to high stumpage rates than to increased cut.

Recreational use of Blackwater River and Withlacoochee State Forest intensified with approximately 75,000 day visits to each forest and with 33,000 overnight paid visits to Withlacoochee and 7,400 overnight paid visits to Blackwater River.

Fruit & Vegetable Inspection

The Division of Fruit and Vegetable Inspection is responsible for the inspection of all citrus, both fresh and processed, in accordance with the Florida Department of Citrus, and regulations of Federal Marketing Committees. The division is also responsible for such inspection of vegetables, melons, nuts, and miscellaneous fruits as may be requested, or as may be required under marketing agreements and price support programs.

Inspection of fresh fruit and vegetables is performed by inspectors through cooperative agreements between the Florida Department of Agriculture and the United States Department of Agriculture.

Inspection of the processed pack is handled by inspectors of the United States Department of Agriculture Processed Foods Inspection Service through contractual arrangements with the Commissioner of Agriculture.

Detailed report of this division's activities for 1973-74 will be found in its annual report, issued from Winter Haven. This particular report will summarize the highlights only.

BUREAU OF CITRUS INSPECTION

The Bureau of Citrus Inspection is responsible for the inspection and certification of all fresh citrus fruit shipped from Florida, both interstate and intrastate, and all fresh citrus fruit utilized at canning plants.

All processed citrus products packed and shipped from Florida are inspected and certified under a continuous inspection program furnished through contract with the United States Department of Agriculture.

The bureau provides the grower, processor and shipper with an impartial basis for the orderly marketing of citrus through commercial trade channels, by furnishing complete maturity analysis and certification of fresh citrus fruit.

The road guard service cooperates fully with the bureau by checking all truck passings of citrus fruit for proper certificates and load manifests.

Inspection of all roadside citrus fruit stands and all gift fruit packinghouses became mandatory several years ago, the responsibility being charged to the bureau. This program continues to bring about improvement in the quality of fruit handled by these sources.

During the summer months the bureau furnishes field personnel for the enforcement of the arsenic spray program.

In addition to the training office, other operations within the bureau include the personnel, statistical and fiscal sections.

1. The personnel office handles all routine personnel functions for the division, including recruitment, assignments, transfers, releases, insurance, retirement, workmen's compensation, and unemployment insurance claims. The division personnel officer is also in charge of training and works closely with the U. S. Department of Agriculture and our own supervisory staff in developing and coordinating various training programs.

During the 1973-74 season approximately 300 inspectors, including 40 new ones, were given individual and group instruction. Our personnel needs have been met, so far, by maintaining close liaison with the U. S. Department of Agriculture and personnel offices in other states, even though it is becoming increasingly difficult because of the seasonal nature of the work and the necessity for frequent transfers.

2. The fiscal office handled everything financial pertaining to the citrus bureau, as well as necessary financial matters of the Division (payrolls, purchasing, etc.). Salaries and expenses of field personnel, and budgets were prepared for industry use in establishing fees. Numerous other operational and administrative details, largely housekeeping, were also handled routinely by this office.

3. The statistical section audited 100,625 fresh and 446,660 cannery certificates for billing and statistical purposes for the bureau during 1973-74. Some of the other forms audited or checked by this section included packinghouse manifests, inspection preliminary note sheets, cannery memos, canner's report of fresh fruit receipts, fruit destruction and regrade forms, plant board scale certificates, and U.S.D.A. daily inspection reports.

During the past season, the statistical section issued daily, weekly, monthly and annual statistical reports on movement of Florida citrus, in addition to reports on diverted fruit, fruit destroyed, and fruit shipped out under containers by special Florida Department of Citrus permits. The following utilization table shows the tremendous tonnage of citrus fruit involved in these reports during this past season, with detailed information available from the Winter Haven office:

Certified Fresh Fruit Shipments — (Standard 4/5 Bushel-Box Equiv.)	
Grapefruit	34,986,428
Tangerines	5,235,911
Oranges	24,682,385
Cannery Commercial — (1-3/5 Bushel-Box Equiv.)	
Grapefruit	29,425,512
Tangerines	1,484,086
Oranges	162,995,467

BUREAU OF CITRUS BOND AND LICENSE

The Citrus Bond and License Bureau is concerned with those sections of the Florida Citrus Code pertaining to citrus fruit dealer's bond requirements, issuance of citrus fruit dealer's licenses, citrus fruit dealer's agent registrations, packinghouse and cannery registrations and field box mark or brand certificates. A complete listing of all citrus fruit dealers and their agents is compiled several times each season.

Administrative responsibilities include extensive field work in the investigation of purchases or sales of citrus fruit in all forms. Complaints involving citrus fruit are filed with the Commissioner of Agriculture and handled as provided for in the Citrus Code and other applicable Statutes.

The appropriate order, based on sworn testimony, is entered in the matter by the commissioner with provision for suspension of license for failing to comply.

All interested parties are served with the Order and the file is closed upon compliance.

**Bureau of Citrus Bond
and License Report**

Total amount of citrus fruit dealer's bonds	\$15,739,000
Total amount of registered shippers and/or canners inspection fee guarantee bonds	\$ 687,325
Total amount of surety bonds posted by dealers advertising as "Bonded Shipper" in accordance with Chapter 57-4, Laws of Fla.	\$ 191,000
Certificates as provided by F.C.C. Regulation 105-1.31 Section 3, issued on request to dealers posting performance bonds	181
Licenses issued to "Bond Exempt Dealers"	84
All citrus fruit dealers licenses issued	1504
Manufacturer's licenses issued	13
Citrus packinghouses registered	212
Canning and/or concentrate plants registered	56
Registered agents of citrus fruit dealers	870
Complaints disposed of	25
Complaints pending	30
Complaints dismissed	1
Amounts paid to claimants by dealers	\$ 36,496
Amounts paid to claimants by sureties	\$ 17,492
Revocation of License proceedings	1
Administrative Hearings	2
Fines imposed by Commissioner of Agriculture	\$ 25,750
Licenses suspended by Commissioner of Agriculture	0
Licenses cancelled by Commissioner of Agriculture	19

BUREAU OF TECHNICAL CONTROL

The Bureau of Technical Control furnishes technical services to the Division and to the industry through extensive administrative, laboratory and field duties.

Administrative responsibilities include coordination of fresh fruit testing at processing plants with the finished product inspection, technical consulting services to the industry, auditing and verification of yield data at processing plants, and the furnishing of comprehensive tabulated weekly data on the internal quality of all fruit received at processing plants.

Laboratory duties include analysis, approval and licensing of fruit treatment materials, preparation and issuance of field equipment and chemicals for maturity testing and internal quality, enforcement of the arsenic spray program, monitoring of pesticide residues on citrus fruits and in citrus products (more than 500 samples during the 1973-74 season).

Field responsibilities during the past season were quite involved and may be summarized as follows:

1. Continuing efforts and most of the working time of the field technical staff were required in the routine setting, maintenance and servicing of more than 100 AMC Model 2700 single-head extractors in the testrooms of packinghouses; and a similar but more extensive program in the testrooms of the processing plants in which more than 50 FMC Model 091B extractors are constantly checked for uniformity of operation by means of the truck-mounted extractor control unit. Improvements and modifications in this extraction equipment during the past season, also, were accomplished with the cooperation of the equipment manufacturers.

2. The fruit sampling system (Kinsey samplers) in the processing plants were all surveyed and maintenance directions issued to plants. In addition, since there have been several modifications to the Kinsey sampler since its inception about eight years ago, a complete engineering update with new detailed plans was accomplished during the season.

3. A major field responsibility is the revision of the load evaluation program at processing plants to mechanize and automate this very important service to both grower and processor. A specific research program towards that end for the past 4 years has been underwritten by the United States Department of Agriculture, the Florida Department of Citrus, and the Florida Department of Ag-

riculture, under the direct supervision of the technical bureau. The system has operated experimentally for the past two seasons at one plant as an adjunct to the routine internal quality analysis of loads, with measurement and print-out of weighings, percent acid, degrees Brix, and with calculations and certification performed through a mini-computer and teletypewriter.

Research on the over-all program continued at the one plant throughout the 1973-74 season. However, arrangements were made in the fall of 1973 to place another such system into a second commercial plant, and to operate the automated equipment as the official means of certification for pounds of solids per load received. This was accomplished in February, and functioned for more than four months with the old "hands" method as the back-up testing procedure. However, it appears that one more season's work with the highly specialized equipment will be required before any final approval can be expected.

BUREAU OF VEGETABLE INSPECTION

The Bureau of Vegetable Inspection inspects and certifies some 30 different commodities.

In a state that produces 80 percent of all vegetables consumed in the United States in the winter months, the vegetable bureau is a very important part of the consumer services inspection program. The bureau protects the grower, as well as the consumer.

About 65 percent of total inspections are made under federal marketing agreements. Commodities covered under these agreements are tomatoes, limes, avocados, and peanuts which are also under the federal price support program. The remainder of our inspections are made on a voluntary basis.

Due to working conditions in the field, most of our inspections have been performed either at packinghouses or pre-coolers during the past season.

In a continuing effort to improve our inspection program, the bureau holds frequent refresher classes for the inspectors in various sections of Florida, to keep them posted on grade interpretation and changes.

Under regulations promulgated by the Florida Tomato Committee, the bureau inspects for grade, size and specified container weights. By implementation of the maximum net weight regulation, the bureau has saved Florida tomato growers thousands of dollars.

Much of the vegetable inspection does not lend itself to mechanization but in some areas, particularly peanuts, the human element has been greatly reduced by mechanical samplers, dividers, pre-sizers, screens, shellers and splitter, all developed by the bureau in a continuing effort to improve and update the inspection program.

The principal products inspected were as follows:

	Packages	Equiv. carlots
Tomatoes	16,097,524	17,181
Corn	2,445,022	3,247
Celery	1,958,101	2,862
Potatoes	1,600,012	3,239
Cabbage	230,948	1,605
Limes	707,238	1,081
Avocados	792,484	1,211
Peanuts:		
Farmers Stock	92,000	tons
Shelled Stock	122,059,530	lbs.
In Shell	196,150	lbs.

Inspection

The Division of Inspection is charged with full administration and enforcement of seven chapters of the Florida Statutes, viz., the feed, fertilizer, pesticide, seed, certification seed, food, and poultry and egg laws. In addition, it has vital supportive responsibilities relating to enforcement of the citrus, fruit and vegetable, milk, livestock, plant industry, and weights and measures laws.

In order to effectively and efficiently carry out these duties, the division is structured into three bureaus, under the direction of an administrative section. Of the 363 employees, most are field inspectors strategically located throughout the state.

Administrative and field enforcement personnel are trained specialists, many of whom are college graduates. Training is maintained as an ongoing program, including individual training, group conferences, seminars, and workshops, conducted both internally and in conjunction with federal agencies.

Statutory authority is provided under the aforementioned laws to enter and inspect premises; register, license, and permit products, firms, and individuals; promulgate regulations; stop sale and destroy violative products; levy penalties and fines, seek injunctive or other court action; and other activities necessary to effectively carry out regulatory responsibilities. Of course, close collaboration with other divisions is constantly maintained.

Most of the division's activities are funded through fees. Only food inspection, which directly serves every citizen of Florida, is supported by general revenue funds. About 80 percent of the division's 1973-74 operating funds went to salaries and related benefits; 20 percent to expenses and capital outlay. Funding by division units was as follows: administrative, 3 percent; feed, seed, fertilizer and pesticide, 24 percent; road guard, 32 percent; and food grades and standards, 41 percent of the total budget.

FOOD GRADES AND STANDARDS BUREAU

The objective of this bureau's activities is dual in purpose. Foremost is protection of the public against food-borne health hazards, and collaterally, prevention of economic loss to the consumer through intentional or inadvertent merchandising deceipts. Enforcement of the food law has been a continuous function of this department for some seventy years.

General activities include inspection of product and facilities at the producer, processor, distributor, retailer, i.e., wherever food products are manufactured, processed, held or offered for sale. In addition, the past several years have brought a dramatic increase in the number of consumer complaints regarding food; over 1,000 of these were investigated during 1973-74.

Inspectional facets include ascertaining suitability and sanitation of buildings, grounds, facilities operations, processes, storage and transportation, and personnel. Methods include organoleptic, on-the-site laboratory analyses, and others. Regulatory enforcement may involve stop sales, destruction, hearings, revocation of permits, administrative fines, injunctions or other court action.

During the fiscal year, a contract with the Federal Food and Drug Administration was extended for a total period of three years and \$64,000. This joint effort in consumer protection between state and federal forces provides superior results in sanitation inspection of food plants in Florida.

In this reporting period major administrative changes were made within the Bureau. Statewide, inspectors' territories were completely reorganized resulting in equalization or workload, increased efficiency and decreased costs. Inspection reporting and

recording were automated under a comprehensive EDP system and records filing was remodeled in consonance with the other two changes.

The federal-state egg grading program was expanded by implementation of a new egg surveillance program whereby under-grade eggs are now removed from the fresh egg market.

Over 80,000 inspections were again made this year but more time was spent on food plant inspection due to the state-federal cooperative program. In conjunction with these inspections, in excess of 8,000 samples were collected; 3,900 stop sale orders issued; 529 thousand packages weighed, 3.5 million pounds of unfit food destroyed; 140 million dozens of eggs and 141 million pounds of poultry inspected.

FEED, SEED, FERTILIZER AND PESTICIDE BUREAU

This bureau is concerned with qualitative and quantitative integrity of the four commodities indicated, along with control of consumer use of restricted pesticides and certification of seed varieties. Activities include registration, licensing, permitting, certification, fee assessment, inspection, sampling, weighing, testing, and grading.

Stop sale orders, destruction of violative goods, revocation of registration or license, and penalty assessment are invoked where appropriate. Over 100 thousand packages were weighed and 30 thousand analytical samples drawn this fiscal year in manufacturing plants, warehouses, retail stores, and on farms and other consumer premises.

Over 60,000 brand registrations were maintained and 2.9 million tons of fertilizer and lime sold in Florida during 1973-74. About one sample for each 370 tons sold was drawn and analyzed; as a result, over \$360,000 in penalties were returned to consumers. Improved inspection techniques meant more complex procedures and a continuing training program.

Following several years' effort in light of environmental needs, and recent comprehensive federal legislation, a pesticide applicators law was enacted by legislature. Regulations will be developed and implementation effected during the forthcoming year. A continuing close surveillance of pesticide products, sales, and use was maintained and kept current with ever-changing federal requirements. Over 15,000 annual restricted pesticide permits and licenses were issued as an integral part of pesticide use control.

Despite a court order the previous year declaring exemption of contract feeds from provisions of the Florida feed law, sampling of this commodity increased 12 percent during the year. Feed samples were routinely screened for the presence of salmonella and pesticide residues and a cooperative contract for medicated feed mill inspection was renewed with the Federal Food & Drug Administration.

The certified seed program continued to increase with nearly one-half million certified tags issued, representing a 20 percent increase in this activity over last year.

ROAD GUARD BUREAU

Completion of our inspection facilities on Interstate Highway 95, with dedication ceremonies in November, culminated several years of determined effort to cope with the expanding interstate highway system's effect on the transportation of agriculture and horticultural commodities.

Legislature granted additional positions, enabling us, for the first time in many years, to adequately staff each of the nineteen stations and fifteen mobile patrol units, thus maintaining twenty-four hour surveillance of major highways and secondary roads crossing the Suwannee and St. Mary's Rivers.

This network is invaluable not only in assuring the quality and integrity of Florida's citrus and vegetables in northern markets, but in protection of Florida's citizenry through checks of incoming livestock, poultry, eggs, milk, and meat, or any agricultural or horticultural commodity or product which might cause direct or indirect adverse effects upon Florida's people, animals, or crops. Inspections, certifications, and quarantines are invoked when applicable.

A serious emergency communication deficiency emerged during the course of our regulatory and enforcement supportive activities; as a result, the extant mobile communication network was extended and improved. Several training sessions were conducted by Department of Law Enforcement specialist in furtherance of our enforcement expertise. Other improvements in facilities, personnel, and equipment were effected during the year, increasing the efficiency and effectiveness of the bureau's operations.

Over 4.7 million truck shipments were inspected during this period, a 20 percent increase over last year. While inspectors were looking for agricultural violations, various other violations were uncovered, such as stolen automobiles and various other goods, marijuana, aliens, non-tax paid commodities, etc.. These activities involved close collaboration with other law enforcement agencies, including county sheriffs, the Florida departments of Revenue, Natural Resources, Law Enforcement, Business Regulation, Transportation, and Citrus; FBI, Border Patrol and others.

Although volume increased, the percentage of tomato violations remained about constant; avocados and limes increased slightly. Citrus and citrus product shipments increased about 7 percent with about the same relative increase in violations found. While livestock shipments were up about 7 percent, a 14 percent increase in livestock violations over the previous year is indicative of the generally acknowledged expansion of illicit live-stock activities and intensification of control measures by this department.

Marketing

The orderly marketing of Florida's agricultural products provides the end results of a strong economy to our state. The Division of Marketing was programmed to take a realistic look at the dramatic changes in food prices, the marketing services needed, and develop programs that will bring needed marketing services to a bewildered producer, anxious wholesaler and retailer and confused consumer. To do this, we carried out the following functions with the main goal of the division to be: "Provide professional marketing services that will promote an orderly marketing system."

ADMINISTRATIVE SECTION

The administrative section continued to place strong emphasis on new concepts and programs pertaining to the marketing of Florida's agricultural commodities.

A new program involving product identification was instituted whereby a study was made to identify agricultural products with significant potential for exports to the Caribbean area.

An economic evaluation of the state farmer's markets operated through the marketing division was initiated and concluded.

The institutional food marketing survey begun during the 1972-73 fiscal year was completed and the results obtained therefrom were published and disseminated under the title, "The Role of Fresh Produce in Florida's Institutional Food Service Industry."

Continued stress was placed on industries' efforts leading toward better labeling procedures and product identification coupled with a uniform system for palletization.

Particular emphasis was placed upon rural area development programs previously initiated during the prior fiscal year. One staff member has continued to represent the Division with all rural area development organizations throughout the state.

The Florida breeders program for quarter horses was continued during the fiscal year with an anticipated increase in involvement in future years.

The division continued support work with commodity organizations through marketing order programs. The commodities involved were tobacco, soybeans and peanuts.

BUREAU OF STATE MARKETS

During the past year, the Bureau of State Markets has worked diligently toward the accomplishment of our goal of assisting in the marketing of farm products by providing information, leadership and facilities necessary to move farm products from the farm to the consumer thereby assuring the consumer a sufficient quantity of better quality agricultural products at reasonable prices, and fair returns to the producer.

A major accomplishment of 1973-74 was the opening of retail markets at our Sanford, Gadsden County, Plant City and Bradford County state farmers' markets. These retail markets have been extremely well received by the small producer and the consumer public. The retail market concept provides a marketing system whereby the consumer buys direct from the producer, enabling the small farmer to realize a greater profit while at the same time giving the consumer a less expensive product fresh from the farm. Retail markets now in operation have generated so much enthusiasm from the consumer and grower that additional ones are being planned for the future.

During 1973-74 the Bureau of State Markets completed several important new construction projects. The first ground level packing house in the state system was completed at our Immokalee market. This type of construction in comparison with a conventional packing house saved approximately 10 percent in construction costs, and should greatly increase the operating efficiency of the tenant.

A watermelon shed was completed at the Suwanee Valley market. This facility was needed due to the increased volume of melons shipped through the market along with stronger demand from buyers for a belt graded melon. In order to meet the demands of continued production increases in the area, a packing house addition was completed at the Wauchula state farmers' market. This will increase the efficiency of this packing operation and possibly double the amount of produce being packed through the facility. In order that modern mechanical equipment could be used, thereby saving labor and increasing efficiency of the respective packing operations, a 1,064 square foot concrete platform addition was constructed at the Florida City market and plywood flooring was added in several packing houses at the Immokalee, Fort Myers, Wauchula and Florida City markets.

Under the Agreement of Intent program, the following projects were constructed during 1973-74: Three coolers and one office at Plant City, an office and cooler at Fort Pierce, a restroom at Immokalee, and a cooler at Wauchula.

Market managers' offices were renovated at our Pompano and Florida City markets in order to provide adequate working space and pleasant surroundings for the respective market staffs to work in.

Due to inflation and the increasing cost of living, the bureau has continued to evaluate and where necessary revise rental rates and fees, so that the market system can continue to be self-supporting.

The bureau has met the never ending challenge of informing the public through presentations to civic clubs and schools, radio and TV appearances and press releases to news media. The image of agriculture is further enhanced by tours of individual markets being conducted for local schools, youth groups (4-H, FFA), and other segments of the agricultural industry, including possible buyers from foreign countries.

Individual markets have been very successful in generating public interest in agriculture by holding open house and ribbon cutting programs. Open house programs were held at the Florida City and Pompano markets, and retail market ribbon cuttings were conducted at the Sanford, Plant City and Gadsden County markets with numerous legislators, city and state officials, agricultural and community leaders, market patrons, and the general public in attendance. The Bureau of State Markets has continued to provide other state agencies with fresh produce for promotional activities throughout the state.

BUREAU OF MARKET NEWS

The Bureau of Market News representing activities in livestock, fruits and vegetables, poultry and eggs, ornamentals and the department publication, "Market Bulletin" experienced a number of adjustments in fiscal year 1973-74.

The Livestock Market News section was undergoing a study on improved market reporting. Detailed examinations were made of auctions, pricing and reporting techniques. The section also moved to a manual application of compiling and distributing livestock movement information which will permit monthly data to be mailed out to industry.

Poultry and egg activities remained routine with few changes initiated awaiting an anticipated relocation into the new Hillsborough County Agricultural Center Building. For the first time this unit installed and has made available poultry and egg market news through the use of a telephone recording device providing information 24 hours a day.

In the fruit and vegetable section, additional programs include a new weekly honey market release, expanded market news availability via telephone recorder units in Fort Myers, Immokalee, Fort Pierce and Lakeland and the initiation of the weekly report on imported flowers.

Publishing the "Market Bulletin" has been eased with the addition of an improved mail list system and an adjustment in presentation sequence of the classified listings and development of feature material. The "Market Bulletin" is now reaching 93,000 subscribers offering agricultural information of interest to both rural and urban residents alike.

BUREAU OF MARKET EXPANSION AND PROMOTION

Promotional activities during the past year were many and varied. The bureau conducted promotions for the Florida Tomato Committee in Atlanta and Boston. Bureau personnel worked with Florida Egg Central, promoting new uses for Florida eggs; assisted the Florida Cowbelles and the Florida Cattlemen's Association in several beef promotions; gave a helping hand to the Plant City Strawberry Festival; and handled the Florida portion of the national Farm-City Week effort, of which the Commissioner served as chairman.

"All-Florida" promotions were held in the New York City area in January and April; point-of-sale kits and other promotional activities were completed for the Florida Peanut Advisory Council; and new market development plans were formulated for the Lime & Avocado Administrative Committee.

During the year, the bureau conducted promotional activities for other groups such as: Florida Fruit and Vegetable Association, Florida Nurserymen and Growers Association, Florida Poultry Federation, Hillsborough Marketing Association, Florida State Beekeepers Association, Florida Celery Exchange, Florida Sweet Corn Exchange and the Florida Watermelon Growers and Distributors Association.

The bureau was active in the division's effort to expand the exportation of Florida agricultural products, working closely with the Florida International Agricultural Trade Council and the Southeastern United States Trade Association by preparing news releases and publishing a monthly newsletter. One staff member accompanied a group of food processors to Central America, acting as a tour leader to explore the opening of new market areas.

Bureau personnel worked the year around promoting Florida agricultural products through the various media. Six mini-menu films were produced and distributed to 100 television stations in the eastern United States. The films were aired 770 times and produced 2,667 requests for the recipes demonstrated. Eighteen radio tapes entitled, "Tips For the Homemaker" were distributed to 168 Florida radio stations during the year.

Home economists in the bureau appeared on 39 television shows in Florida during the year and answered 5,084 requests for recipes utilizing Florida commodities. The home economists also wrote monthly food columns for several state newspapers, each column featuring a recipe tested in our own test kitchen.

The bureau instituted an agricultural education program consisting of film, slides and a question and answer session designed to further acquaint school children with the various aspects of Florida agriculture. The program was conducted initially in three Pensacola schools.

Staff members assisted Florida State Fair personnel during the annual Miss Sunflavor Pageant to select a state agricultural queen. Bureau personnel conducted a tour of agricultural areas in order to prepare her for participation in various commodity promotions.

The bureau continued to publish and distribute a monthly clip sheet on Florida foods for weekly newspapers throughout the eastern United States. Press releases of importance to both agricultural interests and consumers were disseminated as the need arose.

Bureau personnel designed, developed and disseminated point-of-sale materials for various Florida commodities to be used at the retail level. During the year, 76,804 kits were distributed in 35 eastern states and in eight foreign countries.

The bureau was active in working towards the formation of a state-wide Florida Food Industry Council and has been working with the institutional food industry in the United States and Canada to further the use of Florida commodities. The bureau instituted a monthly newsletter, "Feedback," for the benefit of the industry.

Harvest Festivals were held in New York, Toronto, Baltimore, St. Louis and Kansas City. For the first time in several years, a luncheon for the top national food editors was held in New York City. Food industry leaders in each city were introduced to representatives from several of the state commodity groups as a stimulant to market expansion and further utilization of Florida commodities.

The bureau designed and developed a brochure for the Division of Marketing and for the Bureau of Market Expansion and Promotion to advise Florida agricultural interest of the services and assistance available to them.

A transportation and packaging survey was initiated in New York to determine the arrival condition of pallets, containers and contents and the results are being studied in regards to recommendations pertaining to transportation and packaging.

Several personnel from the bureau designed and manned an exhibit for the division at the annual legislative appreciation day.

The bureau continued with normal activities in the area of recipe testing and dissemination, food demonstration, merchandising calls in the eastern United States and Canada and development of presentations for various interested groups.

FLORIDA CROP AND LIVESTOCK REPORTING SERVICE

The goals set forth in the 1973-74 annual plan of work for the Florida Crop and Livestock Reporting Service were generally achieved during the past year. In most instances, efforts to improve accuracy and gain greater efficiency in the day-to-day work were successful.

Administrative records reflecting cost accounting procedures implemented in 1972 have provided valuable cost records by project. The joint administration of the Florida Department of Agriculture and the U.S. Department of Agriculture programs provides both efficient and economic operation of projects. The security of highly sensitive statistical data was maintained. Requests for information were answered promptly.

The monthly publication, "Florida Livestock Roundup" was continued. An agreement with the Florida's Cattlemen's Associa-

tion resulted in the association reproducing and mailing the Roundup each month to the association membership. Mailing costs were paid from funds of the livestock marketing information project. This resulted in increased efficiency and provided the Florida livestock industry with current marketing information. Preliminary results of a poll of members conducted by the Florida Cattlemen's Association during the year revealed a continuing strong demand for information provided by this project.

The initial October 1 forecast of the 1973-74 crops, of 160 million boxes of all oranges and 48 million boxes of grapefruit was well within error limits expected by the industry. The early indication of another extremely large orange crop allowed the industry to formulate market plans necessary to sell the frozen concentrate produced from the near record crop. Preselection of limbs for the 1974-75 limb count survey will provide a basis for improved accuracy and efficiency of operation.

On-tree prices based on spot prices for the various citrus fruits were published each month. The revised annual average on-tree price received for the 1972-73 crop was published after evaluation of all participation data.

Final certified utilization of citrus was still incomplete by the end of July since harvest of the record orange crop continued throughout the summer months. The July production forecast of 166 million boxes of oranges was very near expected utilization for the season. Grapefruit production equaled the October forecast of 48 million boxes.

The annual bulletins, "Marketing Florida Citrus", published by Market News Service and the "Citrus Summary" of the Florida Crop and Livestock Reporting Service are now a joint publication in the summary which eliminated duplication, and still provided all the major statistical series on citrus fruit. Copies of the summary were mailed to a single unduplicated mailing list.

The monthly fruit testing program was continued throughout the citrus season and results published each month. The projection of FCOJ at 1.28 gallons per box on October 1 was raised to 1.30 on January 1, which is near the beginning of heavy concentrate activity. The final outturn was approximately 1.30 gallons per box. The historic series of tests were issued in a special publication.

The biennial census of commercial citrus groves was conducted during the 1973-74 fiscal year and plans are being made for another census in the 1975-76 fiscal year. The new computer program for summarizing census data and producing camera copy tables was implemented in 1973-74.

BUREAU OF LICENSE AND BOND

During this fiscal year there were 2,867 licenses issued to bonded dealers in agricultural products. The revenue from license fees paid in support of these licenses amounted to \$54,240. The substantial increase in the number of licenses issued and fees paid is in a large part the result of our increased efforts in enforcing the law in the nursery industry.

For the fiscal year, licensed dealers posted with this office surety bonds totaling \$17,361,074. The average amount of bond supporting a bonded dealer's license for the year was \$8,282.96. The decrease in average bond amount resulted from a larger number of small bonds furnished by nursery dealers.

The Livestock Prompt Collection Law became effective July 1, 1973. We issued 27 licenses under this law during the year which brought in revenue in the amount of \$2,700. Audits of markets were conducted and 14 were found to have violated the law. In each case, the violators were advised by letter and warned against future violations.

During the year our four field employees made 1,365 contacts with dealers in agricultural products who were unlicensed for the purpose of investigating and determining whether or not these unlicensed dealers were operating in any manner where com-

pliance with the License and Bond Statute would be required. Additionally, there were 4,441 contacts made in an effort to develop information as to the status of dealers transacting business in the state involving the various commodities covered under the License and Bond Statute. Finally, there were 1,264 personal contacts made in an effort to obtain license fees, applications for licenses, and surety bonds involving those dealers known to be transacting business under the authority of this Statute.

Field personnel made 230 contacts involving the investigation of claims during the fiscal year. As of July 1, 1973, we had 19 claims pending with a total monetary value of \$198,011.54. During the fiscal year we received 47 additional claims involving monies totaling \$281,914.69, and, finally, had pending as open files as of July 1, 1974, 15 claims totaling \$38,065.84. During the fiscal year the surety companies involved paid claims totaling \$53,858.80. At the same time, subsequent to administrative action, bonded dealers paid claims without recourse to their bonds in a total amount of \$21,391.82. In addition to the above, unlicensed and unbonded dealers settled claims totaling \$3,338.18. In summary, through our license and bond activities, there were \$78,588.80 recovered either from dealers or their sureties for the benefit of the Florida producers.

The average amount of bond posted by our dealers in agricultural products has decreased this year. This is a result of the expansion of our enforcement efforts in the nursery industry, which has resulted in an increased number of licenses most of which are supported by rather small surety bonds.

The nursery industry received special attention during this fiscal year. As a result of our increased effort during this year, 493 additional nurseries were licensed for the first time.

Plant Industry

The Division of Plant Industry has had an increase in nursery site approvals, due to an increased demand for citrus nursery stock. This program, which has been in operation since 1957, has been a tremendous success in deterring the movements of burrowing nematode on citrus nursery stock.

The Florida nursery industry has continued to grow as many Florida nurserymen have established nurseries in Puerto Rico, British Honduras, Guatemala and other Central American countries to supplement stock grown in Florida. However, the threat of introducing exotic plant pests into Florida has increased as a result of these expansions.

The devastating lethal yellowing disease, which first appeared in Coral Gables and Miami in 1971, has already claimed the lives of over 65,000 palm trees in South Florida. The corypha or talipot palm *Arikuryroba*, *Phoenix reclinata* and *Trachycarpus fortunei* have been added to the lethal yellowing host list and are now quarantined against movement.

The Environmental Protection Agency in Washington, D.C., approved a label on June 18, 1974, to market Terramycin, an antibiotic, to help combat lethal yellowing less than four weeks after Commissioner Conner declared an emergency status on the disease at the division's lethal yellowing status and review forum. The forum was held on April 26 at the Museum of Science and Natural History in Miami.

Terramycin is now available to the general public and commercial pest control operators at a reasonable cost. The chemical is not a cure for lethal yellowing. It simply "buys time" for diseased trees by providing remission of disease symptoms. Treatments have to be repeated every four months. The division has conducted public demonstrations on the application of Terramycin injections in Broward, Dade, Palm Beach and portions of Monroe Counties, which have been quarantined against lethal yellowing.

Previously, the division's cutting and removal program for diseased palms and the planting of the Malayan variety of coconut palm, which is resistant to lethal yellowing, were the only recommended controls. The cutting program has now been phased out and only a limited amount of cutting is being done in isolated areas.

Under the Division of Plant Industry's revised lethal yellowing program, the major emphasis is being put on replacement of diseased palms with resistant Malayan varieties of coconut palm and on the use of Terramycin injections as a control measure. The state will furnish Terramycin to municipalities at half the cost to the state for the injection of coconut palms on public property. The division is continuing to cooperate with research agencies on improved methods of control.

Eradication of the giant African snail appears imminent. The final chemical treatment for the snail was applied April 10, 1974. Surveys will be conducted for at least an additional year. Quarantines are expected to be lifted soon in Broward and Dade Counties, the original infested areas.

The sugarcane rootstalk borer weevil, originally introduced from Puerto Rico, was recently found infesting a large ornamental nursery. Since this nursery has shipped a number of plants throughout Central Florida, division personnel are now making an effort to locate and inspect these plants.

The Environmental Protection Agency approved the use of dieldrin to aid in the control of the sugarcane root weevil. For the past two years, the division has been restricted by the EPA to using chlordane, which proved ineffective. The present control program has been successful in suppressing the spread of the weevil although eradication does not appear feasible at this time. Research by the U.S. Department of Agriculture may eventually aid in providing additional information that will lead to the development of more effective control measures.

The imported fire ant continues to spread through natural movement. It has now moved into portions of Indian River, Hendry and Okeechobee Counties. The regulated area includes all of Florida north of and including Lee, Glades, Highlands, Osceola and Brevard Counties.

A total of 10,685 acres was ground-treated for the pest and 277,952 acres were treated through the farmer aerial treatment program. From the sale of Mirex to individuals through the county extension directors' offices, it is estimated that about 54,000 acres were treated by farmers themselves.

The importance of the fruit fly detection program has taken on added significance with an increase in direct airline flights between Florida cities and countries in which fruit flies are found. Approximately 13,654 traps for the six major species are located in 37 counties throughout Florida.

During the 1973-74 fiscal year, 191,102 honey bee colonies were inspected in 4,802 apiaries. Resident beekeepers were paid \$13,326 in compensation for 1,148 colonies and equipment destroyed because of American foulbrood disease. The cost of inspection was 54 cents per colony, bringing the bureau's operational cost to \$103,230.

The fumigation unit at division headquarters in Gainesville fumigated 1,329 truckloads of citrus destined for California, Texas, Japan, Arizona and Nevada. This was an increase of 207 trucks over last year. A total of \$66,550 was collected in fumigation fees.

The major activities of the Bureau of Citrus Budwood Registration have been dominated by projects associated with the relocation of the Budwood Foundation Grove and virus test facilities. Activities included removal and re-establishment of fuel and water tanks, wind machines and the storage barn, and disposition or storage of other property. Much time has also been involved in planning and securing new facilities. Despite the time spent in phasing out the old grove and nursery blocks, a near normal workload in virus indexing has been maintained.

Approximately 25,499 specimen identifications were made by the Bureau of Entomology. The number of specimens added to the Florida State Collection of Arthropods was 85,354 pinned and labeled specimens; 2,759 slide mounts; 8,446 alcohol-preserved material stored in vials and jars; and 24,479 papered or enveloped specimens.

Nematode samples were processed and nematodes identified from 8,483 soil and root samples received by the Bureau of Nematology. The division's botanist identified 874 plants submitted by division bureaus, the University of Florida, federal agencies and the general public. Regulatory related activities included studies of methodology, taxonomy, and chemical and biological control of plant parasitic nematodes.

A total of 5,728 plant disease specimens was processed by the Bureau of Plant Pathology during the fiscal year. The bureau has initiated investigations on the control of milkweed vine, one of the most serious pests of citrus. Final approval was granted and money was released for construction of a plant disease quarantine greenhouse at division headquarters.

Standards

Through a coordinated program of field inspection and laboratory testing, the Division of Standards regulates gasoline and fuel quality and the accuracy of petroleum dispensers, scales, and other measuring devices, assuring a fair transaction to both the buyer and seller.

The division headquarters and main laboratory are located in a modern, new testing facility in Tallahassee. In the field, the division uses special mobile units for on-the-spot quality testing of fuels and inspecting large capacity scales, high volume meters, and vehicle tank measures. In October, 1974, the division will open a branch laboratory in Port Everglades. The facility is completely equipped with the latest in gasoline testing and weights and measures equipment to serve the needs of consumers in South Florida.

The work of the division is accomplished through the Bureau of Petroleum Inspection, and Weights and Measures.

BUREAU OF PETROLEUM INSPECTION

Gasoline and kerosene sales in 1973-74 exceeded four billion gallons. More than 43 million gallons of this amount was detected and removed from sale at Florida storage terminals and retail service stations by the bureau. The gallonage figure represents in excess of \$20 million retail.

The bureau performs more than 300,000 field inspections and laboratory analyses each year, comparing product tests and measuring device examinations against modern state standards that assure both quantity and quality to Florida users.

Other petroleum and automotive products tested in the laboratory include motor oils, and brake and transmission fluids. Regulations and state standards for diesel and furnace fuel oils have been proposed for adoption in 1975, extending the scope of quality protection to consumers of these products.

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BUREAU OF WEIGHTS AND MEASURES

Laboratories of the Bureau of Weights and Measures house the primary state standards of length, mass and volume that are directly traceable to the National Bureau of Standards in Washington, D.C. From the laboratory, state weights and measures inspectors and other regulatory personnel receive calibrated equipment to test the many weighing and measuring devices used in Florida's commerce. Grocery store scales, taximeters, odometers, linear and fabric measuring devices and packaged goods sold from every retail shelf in Florida are tested to be certain they give accurate quantity information.

Recognizing the importance of owner and user appreciation for weighing and measuring devices, the bureau encourages and sponsors self-maintenance programs. The laboratory calibrates and certifies weights and other measurement standards for authorized scale mechanics and the industry. It cooperates with county and municipal governments in developing programs at the local level, giving weights and measures the broadest possible cov

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